December 27, 2011

Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Comments: FCC File No. SAT-MOD-20101118-00239—LightSquared Application for Modification

Dear Mr. Chairman,

Background. On June 15, 2011 a large number of technology and venture capital firms wrote to you in this proceeding encouraging the FCC to develop a “win-win” solution for America. The filing stressed that it is imperative, and in the vital interest of the country, that the FCC create an environment where LightSquared and GPS can co-exist and that crafting such a solution is consistent with the charter of the FCC.

The filing also observed that wireless services have become an invaluable engine for productivity and innovation in the U.S. economy, and they play a critical component in the U.S. retaining its lead in global competitiveness. The importance of building the world’s first ever nationwide end-to-end full IP wireless network and taking the global lead in LTE deployment cannot be overstated. Once complete, the LightSquared network will sharply increase the nation’s broadband capacity, enhancing wireless competition and providing additional choice in the wireless industry. In addition, LightSquared is poised to deliver unique capabilities to support public safety and has made an aggressive commitment to bring broadband to rural communities. Moreover, its unique, collaborative open-platform design combined with its 100% wholesale business model promises to spawn innovation by supporting new entrants and leading edge applications. LightSquared is enabling an ecosystem of third party software, hardware, and applications providers who will collectively seek to transform not only the wireless industry, but also other industries such as health care, automotive, transportation, education, media, entertainment, and energy. In a highly competitive 21st century global economy, the U.S. cannot afford to stifle such innovation.

LightSquared’s Proposal. On June 30, LightSquared made significant concessions in an effort to construct a win-win solution. It proposed operating on the lower 10 MHz of its authorized L-band frequencies – the frequencies furthest away from the GPS frequencies - which would leave a buffer or guard band of 23 MHz between itself and the closest GPS frequency. This proposal is not only a commendable step forward for resolving this matter, but it is identical to the recommendation made by the GPS Industry Council when it first identified the potential for interference just months ago. Test results show that over 99.5% of existing GPS devices would not be affected if LightSquared were to operate on the lower 10 MHz, and LightSquared has committed to addressing those small number of receivers still impacted.

Fear is Not a Solution. On August 1, 2011, the group of technology and venture capital firms again wrote to the FCC that it is critical to recognize that LightSquared’s sacrifice of full use of its spectrum is a constructive solution that helps develop a new, nationwide 4G-LTE network complemented with satellite coverage as a way of significantly expanding broadband access nationwide while mitigating the risk of GPS interference. In contrast, unfortunately, many of the GPS device manufacturers still appeared uninterested in finding a win-win solution. Rather, their only “proposal” to a problem largely of their own making --by, in the words of the FCC, failing to design “receivers that reasonably discriminate against reception of signals outside their allocated spectrum”—is that the FCC should
simply block LightSquared from using its own spectrum. The support for their proposal is fear; fear that no technical solution is possible.

Fortunately, some members of the GPS community have stepped up to the supposed “interference” issue and confirmed that the true source of “interference” was the poor design of the GPS devices. As one leading expert in the GPS field has observed:

The PNT Advisory Board’s letter to the FCC Chairman on August 3, 2011 blamed LightSquared for the interference and asserted that the only solution was to shut down the company. Rather than innovate and develop a technical solution to the interference problem, those on the PNT Advisory Board, several of whom represent the major GPS companies with a financial interest in the outcome of this debate, chose to use their political might… Despite my findings that proved the August 3rd letter technically wrong, the PNT did not correct the record, nor did they offer an apology to the FCC chairman for making false claims. In the scientific community, an organization that puts out such blatantly wrong information loses its credibility and goes silent for a while.¹

Foreign GPS Manufacturers’ Unclean Hands. Most troubling about the source of this entire dispute is that the vast majority of the leading GPS device manufactures are not US firms. These large foreign firms (i) are marketing in the US unregulated GPS radio receivers that have not been properly engineered to limit the signals they receive to GPS signals but (ii) are seeking to block the lawful use of US non-GPS radio frequencies, including by LightSquared, apparently in order to protect themselves from having to correct their poorly engineered GPS devices. Ironically, most of these large foreign GPS manufacturers could not even themselves qualify under Section 310 of the Communications Act to hold an FCC radio license²; nonetheless, they are seeking to deprive the use of such FCC licenses—despite the GPS manufacturers’ “unclean hands” in manufacturing GPS devices that receive signals beyond the GPS signals.

Conclusion. The GPS-LightSquared debate has been sadly positioned as a “win-lose” situation, suggesting a winner-take-all outcome -- that in order for one technology to exist, the other must lose. Most troublesome, it is foreign manufacturers of unregulated GPS receivers that are seeking to win this fight by outright blocking the lawful use of US radio frequencies and preventing the US from fully utilizing its radio frequencies efficiently. The FCC should not reward such behavior at the cost of US interests.

Sincerely,

Ron Gavillet

CC:
Commissioner Mignon Clyburn
Commissioner Michael Copps
Commissioner Robert McDowell